

Woodhull, (A. A.) Liby

PROVISIONAL MANUAL

FOR

EXERCISE OF COMPANY BEARERS

AND

HOSPITAL CORPS.

BY



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PREFACE.

Drill of litter-bearers is as necessary as instruction in any other duty, civil or military, that requires practice by one man or co-operation by several for its successful execution. Like other drill its object is to familiarize men with the best methods of accomplishing certain ends, and it has no other object. The Provisional Manual issued by authority of the Surgeon General has no practical value because of its want of detail, and other systems accordingly have been devised by those interested in the subject. This scheme, whose general principles I have practised for more than a year, is offered as another attempt to solve a somewhat difficult problem.

To one not familiar with the work these movements may seem unnecessarily numerous, complicated, and precise. But they are only modifications of a few simple principles, and soldiers trained in the easiest and best methods of handling the litter will be by that much the more efficient when required to use it without direct supervision. It would be as unwise to say prepare the litter or the ambulance, or collect the wounded, without explaining how it is to be done, as it would be to move a company by a general direction to the men to go to some designated place. Nevertheless to many medical officers these pages may seem needlessly numerous, and a great deal of the work irrelevant. It is true that a wounded man can be comfortably carried without a knowledge of much that follows, but such knowledge facilitates the work. It is, moreover, especially to be remembered that organized bearers and their management are yet new in our service, that few medical officers are familiar with the details of drill,

and that it is much better to explain at length just how the movements can best be conducted, than to say these "are executed by the commands and means of the authorized infantry and cavalry tactics," which presupposes a thorough knowledge of them by both officers and men. This will be still more necessary when newly raised troops officered directly from civil life are employed, as in war. Any officer or intelligent soldier can select the essentials without difficulty, while the text explains all that it is believed may arise under the conditions in which a litter can be used.

As this is an experimental paper, occasional remarks that would be out of place in an authorized manual have been introduced without hesitation. Usually these are distinguishable by being printed "solid," as is also the case with certain exercises rarely required but introduced to complete the system.

The general principle of the section and its manipulation of the litter is original, but I have not hesitated to make use of many suggestions of others. All reference to mounted bearers and to mere forms of ceremony has been omitted.

The following sections in the order given will illustrate this system:
7, 8½, 76, 9, 12, 21, 22, 29, 34, 37, 39, 40, 45, 46, 63, 65, 70, 72,
97, 106-112, 126, 128, 132, 133, 134, 136, 140, 141.

Fort Leavenworth,

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I. HAND-LITTER DRILL.

PRELIMINARY.

Litters, slings, and bearers.

1. Two litters for the field are issued by the United States, the Halstead and the ambulance litter. Each folds longitudinally upon itself, is held open by iron braces and supported by folding legs. The ambulance litter has telescopic handles and very short legs. The Satterlee litter, sometimes issued to companies, is not fit for field service.

2. Slings, which are essential for prolonged work, are not generally issued with the litter, but can be procured by requisition. The regulation slings are plain leather straps, about two inches wide, with loops in each end, adjustable by a buckle which forms one of the loops. A pattern better suited for field work is described later (par. 33).

3. The proper complement for a litter is four men, but only two are absolutely necessary. This drill assumes four as a basis, and provides for the elimination of the others on occasion.

The section.

4. The set of fours that mans a litter is called a *section*. "Section" is preferable to "squad," which is generally associated with a group of recruits of any size, or with an indeterminate number of men under a non-commissioned officer. "Section" is distinctive, and applying it to the men of a litter will give to the term a particular meaning.

5. The groups of men coming from various companies for drill or service together are detachments, which may be of any size from one man to four or more; but having "fallen in," "counted fours," and "formed" they become a section.

Sizing.

6. The bearers are sized while yet in single rank in the usual military way. Should there remain an unusual difference

in stature between the men of any particular set of fours, they must be especially sized by making the tallest No. 4, and the next tallest No. 1. This special sizing is the single anomaly in this system, it only occurs when there is a greater difference than is commonly found, and after a section has once been formed the men always find their places readily.

To form a section.

7. A section consists of four men in two ranks of two files each, with an interval between the files equal to the front of one man. This formation may be obtained from a set of fours in one rank by the commands:

1. *Twos left,* 2. MARCH, 3. HALT, 4. Right, 5. FACE.

That leaves Nos. 1 and 3 in the front rank covered by Nos. 2 and 4, with the proper interval between the files.

It is claimed for this method that soldiers being already familiar with the orders obey them without instruction, and that it is unwise to multiply terms. On the other hand, it requires three orders and two distinct movements, and when executed the men will not realize without instruction that they have gained a special and fixed formation, and will naturally suppose it is merely part of a drill with whose outcome they have no concern. It will appear to them a part of a continuous manœuvre. And, further, in order to regain that position after being thrown into confusion, as they will be in working with the wounded, various military commands, depending on the situation, must be given instead of the simple one, 1. *Re-form,* 2. SECTION.

8. A better method, therefore, is by the command:

1. *Form,* 2. SECTION,

Where *section* is the command of execution. At this command the odd numbers stand fast, and the even numbers take two backward steps and side-step to the right to cover the odd numbers. The back step is fourteen inches. When broken, the formation is recovered from any position by the command:

1. *Re-form,* 2. SECTION.

Once tried, this method is convincing in its simplicity and its adaptability to any men, even to those ignorant of their facings.

8½. A still better method, suggested by Captain Hoff after this text was prepared, is this: Using the command:

1. *Form,* 2. SECTION.

At *section* the odd numbers move forward one full pace (30 inches) and the even numbers, by one step to the right, assume the places just vacated. This method is recommended.

9. Whichever method is adopted the section when formed has this
2 4 position, Nos. 1 and 3 being the front rank.
1 3

Formation of the section without the litter.

10. This (par. 9) is the ordinary formation of the section without the litter and is known as *with open files*.

At the command:

1. *Close files*, 2. MARCH,

If at a halt the left file side-steps to touch elbows with the right file, and if on the march it inclines to the right to the same position.

With open files is resumed by the left file moving to the left at the command,

1. *Open files*, 2. MARCH.

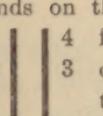
11. The two-rank formation of the section (par. 9) is recovered whenever not with the litter, without awaiting a command. *This rule is general.*

- 11½. For purposes of drill, to recover the one-rank formation the order is:

1. *Form one rank*, 2. MARCH.

At this command Nos. 2 and 4 step briskly to the right of Nos. 1 and 3.

The position of the section with the litter.

12. The position of the section with the litter is as follows: No. 1 stands on the right of the litter, his toes aligned on the

front of the right pole; No. 2 stands midway the length
2 || 3 of the litter, covering No. 1; No. 3 stands on the left of
I || the litter, midway its length, on a line with No. 2; and
No. 4 stands on the left of the left pole, his heels aligned on the
rear end of it, and covering No. 3. The interval between files is the
full front of one man, and must be carefully preserved with the fold-
ed litter. This position is known as *posts*, or *standing to litter*, and is
gained by the command:

1. *Section*, 2. POSTS.

13. This arrangement is preferred because, under all circumstances, the bearers move to their posts without passing each other, either by the direct march to the front or, if the litter is in the rear, by first facing about, taking their places, and then facing to the front. It leaves the section always ready to re-form the double rank (No. 3 moving up on the line of No. 1, and No. 4 on that of No. 2) by direct movements and without confusion.

14. A formation in two ranks is at the same time steadier and more manageable than that in one rank, which some medical officers prefer. When the litter is carried the section must be in two ranks, or, if the full section is present, in three; and there seems no good reason why a single rank or a column of files, in neither of which bearers can work as such, should be regarded as the normal one. Bearer work must be done with litters, and the more easily the necessary positions are assumed, the simpler will be the instruction.

15. To carry a patient one bearer must be at each extremity of the litter, and the intermediate bearers (Nos. 2 and 3) should be near to and not a yard from the side of the litter, as has been proposed. Their duties are to guard the patient, to support the litter when the way is rough, and to insure the steadiness of its legs when it is placed open on the ground. All these require proximity, and proximity to the open litter should imply compactness and mobility in the un-encumbered section.

Special bearers.

16. In the absence of an instructor or a separate commander, No. 4 is chief of section. His place is such that he can supervise the movements best and, however reduced the section may become, there must always be a No. 4, a bearer at the rear of the litter. If a non-commissioned officer, or a fifth man properly appointed, is present he becomes chief of section ~~assisted by No. 2.~~

17. With bearers from the Hospital Corps No. 3 carries the medicine case, and if there is no supernumerary he also carries such accoutrements of the wounded as cannot be laid on the litter, assisted if necessary by No. 2.

18. With company bearers, who carry no medicine case, No. 3 in the absence of a supernumerary takes care of the arms, etc., of the wounded.

The condition of the litter.

19. A litter is *prepared* when it is ready for a patient, *folded* when it is brought into its smallest compass for ease of carriage by a single bearer or by the section, and *strapped* when it is in condition to be carried as freight, to be stacked, or to be stowed away. A litter whose legs only are closed, a condition sometimes necessary for the reception of severely wounded, is *semi-prepared*.

20. A litter lying partly open or otherwise disturbed, and not in one of the three above described conditions, is spoken of as *disarranged*.

To obtain the litter.

21. The section being formed, should a litter not be lying in its immediate front the instructor may command:

1. *No. I* (or other number) or, 1. *Right* (or *left*) *file*, 2. *Procure*, 3. *LITTER*,

At the same time explaining where it is to be found. The designated

number or file at once proceeds in quick time by the shortest route and returns with it *folded* to the place in the ranks. A single bearer will carry it on his shoulder (par. 23).

Should a file be sent for a litter on reaching it if it is in front of the section the file will face to the rear and carry the litter, the right file by the right hands and the left file by the left hands, and on regaining its position by the most direct route will face to the front. If the litter is in rear the file will carry it in the ordinary way (par. 59).

22. Having regained the section the single bearer brings the litter to an *order* (par. 47) without further command, and when so ordered *grounds* it (par. 50).

The file keeps the litter at a *carry* (par. 59) until otherwise ordered.

23. When a single bearer as part of a section carries a litter, it should be canvas down and balanced near its centre on the shoulder, being steadied by the corresponding arm, the hand resting within the angle of the braces. When in ranks, the forward end is inclined a little inward and the rear end is sufficiently elevated to clear the rear rank. This is the position of *shoulder*.

24. If the single bearer who carries the litter belongs to the right file the litter should be on his left shoulder, and if he belongs to the left file on his right shoulder. For long distances or when not a member of a section, he may bear it on either shoulder or otherwise at will.

25. If a litter is lying in the immediate vicinity of a section and in front of it, the instructor commands:

1. *Section*, 2. *POSTS*.

At the second command the bearers take their proper places (par. 12). Should the litter not be in its direct front, the section inclines in the proper direction without special command.

26. Should the litter be lying in rear of the section, the instructor commands:

1. *Section*, 2. *Backward*, 3. *MARCH*, 4. *HALT*,
or 1. *About*, 2. *FACE*, 3. *Section*, 4. *POSTS*,

As the case may be. In the latter case, having gained their places the bearers face to the front without further command.

27. But if the litter is more than a yard or two distant, the section is marched to it in the ordinary military manner.

THE MANUAL OF THE LITTER.

28. The following exercises are introduced to familiarize bearers with the use of the litter, and to accustom them to the easiest meth-

ods of handling a somewhat unwieldy instrument. This manual is not complicated, but the movements are precisely laid down to secure uniformity and to supply any possible deficiency in the instructor.

It is recommended that they be carefully observed, with the assurance that very moderate practice with ordinary men will be amply rewarded.

At the beginning the instructor may conveniently introduce the use of numbers, as in the manual of arms, to prevent slurring through carelessness or haste.

To prepare the litter.

29. The section being at *posts* (par. 12) and the litter lying *folded* on the ground (par. 45) to prepare it. The command is:

1. *Prepare*, 2. LITTER.

At *prepare*, the section faces inward and at *litter* Nos. 1 and 4 bend over, grasp the end of the right pole with their right hands and rise, their arms hanging at full length. This leaves the litter suspended longitudinally, canvas to the left. At once Nos. 2 and 3 extend first the braces and then the legs, No. 2 working at the front and No. 3 at the rear. As soon as the legs are opened Nos. 2 and 3 take the litter from Nos. 1 and 4 by supporting it horizontally with both hands widely extended, palms up, and gently lower it to the ground, taking care to properly adjust the legs. Nos. 2 and 3 then rise and the section faces to the front. When slings are attached to the litter these are laid on the canvas, dressed side up, with the swivel joint turned in and flat.

30. Should a device for the automatic adjustment of the litter legs now under investigation be adopted, these instructions are to be modified thus: As soon as the legs are opened Nos. 2 and 3 take the litter from Nos. 1 and 4 by supporting it horizontally with both hands near the middle of the poles, twelve inches apart, palms up, and gently lower it to the ground, when they bear enough weight upon it to secure the legs firmly.

31. The prepared litter when empty is moved only over very short distances for convenient change of position, except for drill. The command is :

1. *Lift*, 2. LITTER.

At *lift* No. 1 takes one step to the front, a side step to the left and a back step between the poles, and No. 4 takes a back step, a side step to the right and a short step to the front between the poles: If slings are used they are now *applied* (par. 34) and the bearers stoop to grasp the handles; at *litter* they rise together, No. 4 giving the signal. The section awaits the command to march. The slings are not *applied* with the empty litter, except for drill.

32. When the litter is found strapped, the command may be :

1. *Unstrap*, 2. *LITTER*, or 1. *Prepare*, 2. *LITTER*,

In either case the first step is the same. At *unstrap*, the section faces inward, and at *litter*, Nos. 1 and 4 raise the litter horizontally by both poles, canvas up, when Nos. 2 and 3 unfasten the straps. Straps that are attached to the slings are then buckled into themselves in the hole nearest the free end. Detached straps are passed by Nos. 2 and 3 around their waist belts, fastening the ends; or, if belts are not worn, they are taken care of otherwise. The litter is now *unstrapped* but *folded*, and is in condition to be *grounded* or to be *carried*. If the original order was to *prepare litter*, the litter is now turned canvas to the left and held by Nos. 1 and 4 by the right pole only, and the movement completed (par. 29). Should the slings that belong to the litter be detached, as soon as the straps are freed and secured they are laid by Nos. 2 and 3 across the shoulders of Nos. 1 and 4, free ends to the front, which are then passed by Nos. 1 and 4 under their waist belts. Should the slings be attached to the litter they will be adjusted as hereafter explained (par. 34).

Slings.

33. The slings proposed for use with the litter and contemplated in this system consist of three pieces, one hollowed to fit the neck, one with a fixed loop having a snap-hook at its end, and one with a loop joined by a swivel joint. These are united by two buckles. To the inner side of each fixed loop is fastened a narrow strap to hold the folded litter together. Two light chains, 10 inches long with $\frac{1}{2}$ inch links, are attached to the litter on the outer side of the poles very near the line of the legs, at the rear on the right pole and in front on the left. The swivel loops are habitually kept upon the right front and the rear left handles, and when not in use the snap-hook is caught in such a link of the chain as will keep it fairly taut.

To adjust or to apply the slings.

34. In preparing the strapped litter, after it has been opened the slings must be *adjusted* to the bearers. Slings once adjusted are *applied* to the bearers whenever the wounded are to be carried, or for drill. Excepting as to the change of length in the slings, the motions are identical for both operations. At the command:

1. *Adjust*, 2. *SLINGS*,

Nos. 1 and 4 step between the poles as in *lift litter* (par. 31.). When carrying the detached slings (par. 32) they stoop, slip the loops over the handles, having freed them from the belts, and rise taking the time from No. 4. When the slings are of the improved or attached pattern, the bearers having stepped between the poles

(par. 31) No. 1 faces to the right and Nos. 2 and 3 unsnap the fixed loops from the chains. No. 2 hands the end of the right sling to No. 1 who passes it over his shoulders and faces front, and No. 3 hands the end of the left sling to No. 4 who passes it over his shoulders : Nos. 1 and 4 then stoop, slip the loops over the handles and rise at signal from No. 4. With either variety of sling as the bearers rise No. 2 moves to the front of No. 1 and No. 3 near to No. 4 and change the length of the slings as may be necessary, by means of the buckles, and also adjust them comfortably to the back of the neck.

Slings once adjusted require no alteration until the bearers are changed, but whenever they are used Nos. 2 and 3 assist in applying them comfortably against the back of the neck. The slings having been properly adjusted, at the command :

1. *Lower*, 2. LITTER,

The litter is placed upon the ground and the bearers relieve themselves of the slings (par. 35).

The command

1. *Apply*, 2. SLINGS,

Is executed in an identical manner, except that the slings are not changed in length.

To relieve the bearers of slings.

35. The prepared litter with slings applied having been placed upon the ground, at the command :

1. *Lower*, 2. LITTER,

The bearers relieve themselves of the regulation slings by slipping both loops from the poles, rising and passing the ends of the slings under their waist-belts.

36. If the improved slings are worn, No. 1 presses the swivel loop against the shoulder of the pole, slips the other loop off the left pole, rises, faces to the right and gives the free end of the sling to No. 2 who snaps it in the chain. No. 1 at once faces to the front and takes his place at *section posts*. At the same time No. 4 passes the swivel loop against the shoulder of the left pole, releases the other loop, rises and gives the free end to No. 3 who snaps it in the corresponding chain. No. 4 takes his place at *section posts* and all stand fast.

37. The rule is general that straps and slings must not be laid on the ground. If they are detachable they must be carried on the person of the bearers (pars. 32, 35). If they are attached, they must be cared for as in par. 36.

To fold the litter.

38. The litter is habitually carried *folded*, except in the intermediate presence of the wounded or for purposes of drill.

39. The litter being *prepared* and the section at *posts*, the command is:

1. *Fold*, 2. LITTER.

At *fold* the section faces inward and at *litter* Nos. 1 and 4 bend and with their right hands raise the litter by the right pole, their arms hanging at full length. Immediately Nos. 2 and 3 fold first the legs and then the braces. No. 2 at the front and No. 3 at the rear. Nos. 2 and 3 support the left pole as it rises until Nos. 1 and 4 take it in their left and right hands respectively and hold the litter steady, the right pole uppermost and resting against the inner side of the wrist, when all face to the front. This position is known as the *carry* and the section may march with, or *ground*, or otherwise temporarily dispose of the litter.

To strap the litter.

40. The litter is strapped at the termination of any exercise, for convenience of storage or of transportation. The command is:

I. *Strap*, 2. LITTER.

At *strap* the section faces inward and at *litter*, if the litter is not already folded, that movement is accomplished (par. 39). The litter being folded, at a carry by section and the section facing inward, Nos. 1 and 4 support it by both poles horizontally, canvas up, their arms hanging full length. Nos. 2 and 3 immediately fold the canvas twice to the right, snap the snap-hooks into the last (free) link of the chain, push the loops snug against the shoulders of the handles, turn the joints inward and shorten the slings to the utmost by the buckles. They then pass the straps firmly around the litter and fasten them securely. The section then faces to the front. When the litter is strapped, there must be no free ends nor loose folds to catch other objects.

41. Should the slings have a joint loop but be not attached to the litter (by chains), in strapping the loop is pressed well home and turned inward, the sling shortened if necessary and the movement completed as before described.

42. Should the slings neither be attached nor have a joint loop, they must be laid neatly upon the top of the folded canvas, dressed side up, and the straps passed through both loops. Or each sling may be doubled upon itself and caught by its middle around its fellow, both loops of each sling remaining at the same end of the litter. Or they may be laid flat as first described, and the straps passed over them about six inches back of the loops, to hold down the legs and braces. The regulation slings are not easily packed with the litter.

43. If no straps are provided, such fastenings must be extemporized from any convenient material, as rope, leather strips, wire or, if necessary, bandages. Litters cannot be transported without risk unless securely tied up.

It is useless to attempt to secure the litter for wagons or other rough transportation merely by winding the slings about it.

44. The folded litter may be *carried by section* or *by file*. When borne by a single bearer it is said to be *shouldered*.

To ground the litter.

45. The litter being folded and carried by section (par. 39), or by file (par. 57), the command is:

1. *Ground*, 2. **LITTER**.

At *ground* the section faces inward, and at *litter* the bearers carrying it lay the litter gently on the ground directly between the files, canvas up, and Nos. 2 and 3 fold the canvas to the right and arrange the slings, if they are attached, along the top of the canvas.

To carry the folded litter.

46. When the litter is *grounded*, (par. 45) at the command:

1. *Carry*, 2. **LITTER**,

Nos. 1 and 4 bend, raise the litter by both poles and as they rise turn the right pole uppermost, canvas to the left, holding the litter by the left pole, the right resting against the inner side of the wrist (par. 39). At **MARCH** the section steps off in quick time.

The litter being at the shoulder, to bring it to an order.

47. At an *order* the litter rests vertically against the shoulder, front handles on the ground just in advance of the ankle, canvas to the rear. It is steadied by the corresponding arm passed around it from behind, the hand resting just above the angle of the braces. The position *order litter* is habitually assumed by a single bearer in charge of a litter when at a halt, whether deployed or in ranks, without awaiting command.

48. For purposes of drill, the litter being at a *shoulder* (par. 23), the command is:

1. *Order*, 2. **LITTER**.

At *order* the bearer grasps the litter with both hands just in front of the shoulder, and at *litter* depresses the front handles, lifts the litter clear of the shoulder and lowers it to the position of *order* (par. 47).

The litter being at an order, to bring it to a shoulder.

49. The command is :

1. *Shoulder*, 2. LITTER.

At *shoulder* the bearer grasps the litter with both hands just below the middle, fingers to the front, and at *litter* raises it to the *shoulder* (pars. 23, 24).

The litter being at a shoulder or an order, to ground it.

50. The litter is first brought to an *order* (par. 47) and the instructor commands :

1. *Ground*, 2. LITTER.

At *ground* the bearer grasps the litter near the middle with both hands, fingers against the poles, thumbs up, and raises it slightly ; at *litter* he faces inward, swings the lower end of the pole a little to the front, turns the canvas to the front and, bending, lays the litter upon the ground midway between the files, canvas up. If the litter is held by a front-rank man in section, at the command *litter* No. 4 faces inward, seizes its upper end with both hands as it descends and assists in placing it on the ground. If it is held by a rear-rank man, No. 1 faces inward, seizes the lower end as it rises, and assists in placing it on the ground. When the litter is *grounded* the section stands at *posts* (par. 12).

The litter being at an order and the section at a halt, to carry litter.

51. The instructor commands :

1. *Carry*, 2. LITTER.

At *carry* the bearer grasps the litter near the middle with both hands, fingers against the poles, thumbs up, and raises it slightly ; at *litter* he faces inward, turns the canvas from him, swings the lower end to the front, and brings the litter to a horizontal position. If the litter is held by a front-rank man, as it descends No. 4 faces inward and seizes its upper end with both hands ; if it is held by a rear-rank man, No. 1 faces inward and with both hands seizes the lower end as it rises. As soon as it is horizontal it is turned right pole up, and held at the *Carry* (par. 39).

The litter being grounded, to bring it to an order or a shoulder.

52. The command is :

1. *Order*, 2. LITTER, or 1. *Shoulder*, 2. LITTER.

When the bearer is deployed, at the command *order* he approaches

the litter and at *litter* bends, grasps it with both hands near the middle and lifts it vertically to an order (par. 47). At *shoulder* he first brings it to an order as just directed and then raises it to the shoulder as prescribed (par. 49). When the bearer is in ranks, at the command *order* or *shoulder*, the litter is raised to a carry (par. 46), and at *litter* Nos. 1 and 3 face inward, No. 3 grasps the litter with both hands in rear of the centre, the left hand uppermost, and passes it forward to No. 1 who receives it by slipping both hands toward the centre, the right hand uppermost, and then bringing it to an *order* (par. 47) rear end up, both bearers facing front. From the order it is immediately raised to the shoulder (par. 49). When in ranks, the *order* is always against the shoulder next to the middle of the section.

The litter being grounded, to carry it by section.

53. This is done as provided in par. 46.

The litter being carried by section, to ground it.

54. This is done as prescribed in par. 45.

The litter being carried by section or by file, to raise it to the shoulder, marching.

55. The command is:

1. *Shoulder*, 2. *LITTER*.

At *shoulder* the designated number bends toward the litter, grasps it with both hands near the middle turning the canvas toward him, and at *litter* raises it and balances it upon the shoulder as in par. 23. The other member of the file assists in raising the litter as far as he can do so without losing his place in ranks.

The litter being at the shoulder, to transfer it on the march to the section or to the file.

56. When the command is;

1. *By section*, 2. *Carry*, 3. *LITTER*,

At *section* the bearers arrange themselves as at *posts* (par. 12); at *litter* the bearer raises or depresses the free end of the litter, as the case may be, and No. 1 or No. 4 grasps it with both hands, No. 1 turning inward without changing his direction of march, and assists the bearer to lower it to the *carry*. Should No. 2 or No. 3 be that bearer, he transfers it when lowered to No. 1 or No. 4.

When the command is:

1. *By file*, 2. *Carry*, 3. *LITTER*,

At *file* the section is *extended* (par. 57), and at *litter* the litter is

lowered as just described except that it is carried by the file instead of the section.

To extend the section.

57. The command is :

1. *Extend*, 2. SECTION.

When *with open files* (par. 9) at the second command, if at a halt, the front rank marches two paces to the front and halts; when marching, the rear rank marks time while the front rank advances two paces, and it then resumes the march. When at *section posts* (standing at litter) (par. 12) or *carrying* the folded litter by section (par. 46), if at a halt, No. 2 moves forward on the line of No. 1, and No. 3 steps backward to the line of No. 4. When marching, No. 3 advances at double time to the line of No. 1, and No. 2 marks time until No. 4 is aligned with him.

To carry the litter by file.

58. When the folded litter is *carried* by section (par. 45) the 46 command is :

1. *Right (or left) file*, 2. *Carry*, 3. LITTER.

At the first command the section is *extended* (par. 57). When the section is *carrying* the litter, at *litter* the right (or left) free bearer takes the litter from the bearer next to him and carries it right pole up, as by section. When the litter is *grounded*, at the second command the indicated file bends and lifts the litter in the same manner as by section (par. 46).

59. When the litter is already being carried by one file and the other file is ordered, it is simply transferred to the corresponding bearers. (*Carrying by file* is used chiefly to relieve the bearers, or to leave one file free for other duty.)

The litter being carried by file, to carry it by section.

60. The instructor commands :

1. *By section*, 2. *Carry*, 3. LITTER.

At *litter* No. 3 or No. 2 transfers the litter to No. 1 or No. 4, as the case may be, turning the litter upon its long axis, if necessary, and carrying it as provided in par. 39. The released bearers at once resume their posts, when at a halt by No. 2 stepping forward and No. 3 stepping backward, and when on the march by No. 2 moving forward in double time and No. 3 marking time until the middle of the litter is abreast of him.

The section being extended, to recover the ordinary formation.

61. Should a file be carrying the litter, Nos. 2 and 3 resume their posts at the command, as in par. 60 :

1. *By section*, 2. *Carry*, 3. *LITTER*.

Should the section not be carrying the litter, the command is:

1. *Recover*, 2. *POSTS*, or 1. *Re-form*, 2. *SECTION*.

At *posts* Nos. 2 and 3 resume their posts as provided in par. 60, or at *section* they proceed as in par. 63.

To relieve bearers.

62. When for any reason it is desired to relieve the men actually carrying the litter, the section is first brought to a halt and the command is given:

1. *Exchange*, 2. *NUMBERS*.

At *numbers* Nos. 1 and 2 change places and numbers, and Nos. 3 and 4 do the same. The numbers of the bearers depend upon their positions at the litter.

To move the section independently of the litter.

63. At the command:

1. *Re-form*, 2. *SECTION*.

Nos. 1 and 3 align themselves on the front ends of the poles with the proper interval and Nos. 2 and 4 cover them as in the ordinary formation (par. 9). The section may now be marched independently of the litter as desired.

To transfer litters.

64. When it is necessary to transfer a number of litters from one point to another rapidly, at the command:

1. *Deploy bearers*, 2. *transfer*, 3. *LITTERS*.

The bearers carry the litters at will from one designated spot to the other. They then re-form sections where they may have been directed.

To stack litters. (CAPT. HOFF).

65. Several sections being in line with strapped litters at the order by Nos. 1, at the command:

1. *Stack*, 2. *LITTERS*,

Nos. 1 of the first and third sections advance three yards in front of the second section and lock the litters, inclining the apex to the rear; No. 1 of the second section then locks his litter, all making a

broad base and testing it for firmness. At the command LAY ON, the other Nos. 1 lay on the loose litters.

To break stack.

66. The sections being in line, at the command :

1. *Take*, 2. **LITTERS**,

No. 1 of each section advances to the stack, those of the left sections shouldering the loose litters and at once returning to their ranks, when those of the three right sections break the stack, No. 1 of the second section withdrawing the rear litter first, and all resume their places.

To inspect folded litters.

67. The sections being in line with the litters at an order by Nos. 1, the command is :

1. *Inspection*, 2. **LITTERS**.

At *litters* each litter is held vertically in front of the bearers at arms' length, canvas to the front, and as the inspector draws near it is raised sufficiently just to clear the ground and is rotated slowly back and forth as long as the inspector examines it. The *order* is then resumed.

To inspect the prepared litters.

68. The sections being in line with litters prepared, at the command :

1. *Inspection*, 2. **LITTERS**,

All the sections march backward and form with open files (par. 9) two yards in rear of the litters. As the inspector leaves a litter, the section resumes its post at the command POSTS from No. 4.

To use the litter with reduced numbers.

69. While four is the normal complement of bearers for a litter, the section frequently will be reduced to three or two. No. 2, or No. 3, as may be present, always replaces No. 1 or No. 4 when absent; when both No. 1 and No. 4 are absent, No. 2 replaces No. 1 and No. 3 replaces No. 4. Bearers assuming the places of the absent also assume their numbers.

70. When three bearers are present the litter is *prepared* as in par. 29 excepting that No. 2 or No. 3, as the case may be, opens the braces and the legs at both ends, Nos. 1 and 4 step between the handles and support the litter horizontally by both poles, gently lowering the

rear first and drawing it slightly forward to set the legs, and the third bearer attends to both front legs.

71. In *folding* and *strapping* the litter the third bearer discharges the duty of both the intermediate bearers.

72. When only two bearers are with a litter, they *prepare* and *fold* it by working at their respective ends. In placing it open on the ground the rear end is lowered first and it is drawn gently forward to set the legs, when No. 4 disengages himself from the handles and runs to arrange the front legs.

73. To *strap* or to *unstrap* the litter with two bearers, when *folded*, it is first *grounded* (par. 45), and the straps are then arranged.

74. The preceding instructions teach the manipulation of the litter by a single section, and cover all the movements necessary for its complete and easy control. The more familiar bearers become with the use of the litter the more efficiently will they transport the wounded.

75. The following rules for the exercise of one or more sections embrace all of infantry drill that it is necessary to practise, and are given in detail for the convenience of instructors. It is impossible to move the section without instructions of some sort, and these instructions should be in military phrase and the instructors should not be required to study other books (as tactics) to learn such methods.

TO ORGANIZE THE COMMAND.

76. The bearers, wearing their belts and gloves, being assembled, the senior non-commissioned officer, who for purposes of drill will always be known as sergeant, standing four yards in front of the centre, commands **FALL IN**, when all the privates form one rank facing to the right.

The sergeant then sizes the bearers, if necessary, and commands :

1. *Left*, 2. **FACE**,

When all the bearers face to the left. He calls the roll and then commands :

1. *Count*, 2. **FOURS**.

Each set of fours constitutes a section, which is the unit for hand-litter drill. Fours having been counted he commands :

1. *Form*, 2. **SECTIONS**,

Which is executed as in par. 8. A broken set of fours on the left, if consisting of more than one man is treated as a reduced section (par. 69). If but one man is left over, he takes position as a file closer unless otherwise directed. The sergeant then faces to the front, and salutes the commanding officer, who stands a few yards in front of

the centre, and reports, Sir ! (so many) sections : all the bearers present, or (so many) bearers absent, as the case may be.

The officer then commands :

1. Number, 2. SECTIONS,

When every No. 1, beginning on the right, calls out in succession the number of his section. If there are more than three the instructor announces which is the centre section. If work with litters or the handling of dummy wounded is to be undertaken, the instructor directs the gloves to be removed. When the sections are to be exercised in marching without litters the gloves continue to be worn.

Movements of sections with folded litters or without litters.

77. Marching without the litter prepared, the time is quick; marching with the litter prepared the time is always common unless otherwise ordered. Double time is never to be used, except for very short distances or under great emergencies.

78. The section having obtained litters, (par. 21), these are brought to a *shoulder* or a *carry*. For any extended movements the *carry* is always preferred.

79. The necessary interval between litter-bearing sections while in line, taking the distance from No. 3 of one section to No. 2 of the next section on the left, is three yards, and when the ground permits four yards should be taken. The interval in column between No. 4 of one section and No. 1 of the succeeding section should be a little less or a little more than one yard, depending upon the intervals in line.

To take intervals.

80. The sections being in line with litters at a shoulder, the instructor commands :

1. *By the right (or left) flank,* 2. *Take intervals,* 3. *Carry litters,*
4. **MARCH.**

(Any special interval that is required is announced as a part of the second command, otherwise one yard is assumed). At the second command the first section wheels to the right (par. 81), and at the third command it brings the litter to a *carry*, and at *march* it advances in quick time in the new direction, each succeeding section wheeling as soon as its flank is clear and following one yard in rear of the section on its right until the last section is one yard in rear of its predecessor, when the instructor commands :

1. *Sections left,* 2. **HALT,**

Or continues the march in column or in line, as may be determined.

If the shouldered litter is not brought to a carry the interval is four yards.

Being in line, to march by the flank.

81. The instructor commands:

1. *Section (or By sections) right (or left), 2. MARCH.*

At *march* the section wheels to the right (or left) on No. 2 (or No. 3), as a fixed pivot if at a halt or a movable pivot if on the march, the pivot number facing at once in the new direction and cautioning No. 1 should he wheel to exceed ninety degrees.

To face to the front sections faced to the right or left.

82. The instructor commands:

1. *Section (or By section), left (or right), 2. MARCH.*

This and all the movements covering ninety degrees are executed at a wheel, as just described. When several sections are marching together, care must be taken to move simultaneously, and especially to preserve the intervals.

To change the direction of the line.

83. Marching in line the instructor commands:

1. *Right (or left) turn, 2. MARCH.*

The first command is given three yards from the turning-point. At *march* the right section wheels to the right (or left) and continues the march without changing the cadence or length of step; all the sections increase the gait and hasten to take place on its left, resuming the step on arriving in line. Or

84. Marching in line the instructor commands:

1. *Right (or left) wheel, 2. MARCH, 3. Forward, 4. MARCH.*

At the second command all the sections wheel to the right on a movable pivot. This pivot, which is No. 2 of the right section, takes steps of nine inches and gains ground in describing a small curve; No. 3 on the left section takes steps of the full length, and the intermediate bearers diminish the length of their steps in order to preserve the alignment. At three yards from the perpendicular *forward* is commanded, and *march* at the instant the change of direction is completed. If at a halt the wheel to the right is made on No. 2 of the first section as a fixed pivot, and to the left on No. 3.

To march in column of sections.

85. Being in line the command is:

1. *Right (or left) forward,* 2. *Sections right (or left),* 3. **MARCH.**

At *march* the right section moves straight to the front, shortening its step until the second section has attained the new direction. The second section wheels to the right as directed to march by the flank (par. 81), but when its wheel is two-thirds completed it wheels to the left on No. 3 as a movable pivot and follows the first section. The succeeding sections follow in the same manner.

To change direction in column of sections.

86. Being in march the instructor commands:

1. *Column right (or left),* 2. **MARCH.**

At *march* the leading section wheels on No. 2 (or No. 3) as a movable pivot, and the other sections move forward and wheel on the same ground.

87. *Column half right (or left)* is similarly executed.

88. To move a column of sections and to change direction at the same time the instructor commands:

1. *Forward,* 2. *Column right (or left),* 3. **MARCH.**

To march the column of sections to the rear.

89. The instructor commands:

1. *By sections, right (or left) about,* 2. **MARCH.**

The sections wheel about on a fixed pivot.

Being in column of sections, to form line.

To form line to the right or left.

90. The command is:

1. *Sections right (or left),* 2. **MARCH,** 3. **HALT.**

At *march* the sections wheel to the right, on a movable pivot if on the *march*, on a fixed pivot if at a *halt*.

91. *To form line on the right or left*, although practicable, is not a desirable movement for bearers; but if required it may be executed as in the infantry from column of fours.

To form line to the front.

92. The command is:

1. *Right (or left), front into line,* 2. **MARCH,** 3. **HALT.**

At *march* the first section moves straight to the front, the other sections incline to the right or left until opposite their proper places,

when each marches to the front. The command **HALT** is given at the instructor's discretion, and is observed by the first section at once and by the other sections in succession as they reach the line. The instructor may command *double time*, when the leading section moves at quick time and the others oblique in double time, taking quick time as they arrive on the line. The line may be dressed and advanced as desired.

Marching in line, to avoid obstacles.

93. The command is :

1. *Obstacle,* 2. *So many sections from right (or left) to rear,* 3. **MARCH.**

At *march* the designated sections execute left (or right) forward sections left, on the extreme right (or left) section that remains in line.

To form into line sections broken to the rear.

94. The command is :

1. *Rear sections right (or left) front into line,* 2. *Double time,* 3. **MARCH.**

At *march* the sections in rear incline to the right (or left) until opposite their places in line when they move to the front, all in double time.

95. With loaded litters no movement in double time is to be executed, and where obstacles are encountered they are to be avoided at the discretion of the respective chiefs of sections.

To face a section or line to the rear, and to march it to the rear.

96. The command is :

1. *Section (or By sections) right (or left) about,* 2. **MARCH,**

When the section immediately wheels to the right (or left) and continues the movement for 180 degrees, or as nearly so as the nature of the ground permits.

When the obstacles are too great for wheeling or when desired for purposes of drill, the command is :

1. **HALT,** 2. *About,* 3. **FACE,** 4. *Forward,* 5. **MARCH.**

If on the march the command *about* is given as a warning the instant the section halts so that, instead of relieving themselves of their slings, Nos. 1 and 4 slip the loops from the handles as soon as the litter is placed on the ground, and retain the slings on their shoulders. At *face* all the bearers face to the rear and Nos. 1 and 4 slip the loops upon the handles and rise, and at *march* the section moves off in the new direction.

Should the command have been given while at a halt, the slings are applied as heretofore described (par. 34) excepting that the loops are placed on the opposite handles.

This movement is only to be employed for temporary purposes and, as it compels the carriage of the patient head foremost, the bearers are to halt to resume their proper facing and to wheel the litter by command at the first opportunity.

97. When, as is sometimes necessary, the patient must be carried for considerable distances head first, as up a long incline, the ordinary position of the bearers must be changed, thus: Having reached the foot of the incline the litter is halted and the command is:

1. *Change posts*, 2. **MARCH.**

At *posts* Nos. 1 and 4 slip both loops from the handles, retaining the slings upon their shoulders and at *march* all the bearers pass by the right half way around the litter and halt facing to the rear. At *lift litter* the loops are slipped upon the handles, the bearers still facing to the rear, and by command the section wheels and continues its march. When a level or a decline is reached, the bearers again change position and the litter is again wheeled so that the patient is carried feet first.

To form double column of sections.

98. Being in line, the command is:

1. *On such sections*, 2. *Form double column*, 3. **MARCH.**

At *march* the designated sections move forward and the adjacent sections execute *right* (or *left*, or *right and left*), *forward*, *sections right* (or *left* or *right and left*) on them as leaders.

99. Being in column, the command is:

1. *Form double column*, 2. **MARCH.**

At *march* the even numbered sections oblique to the left in double time until they come into line with the odd numbered sections immediately in their front, and all the sections, except those leading, increase their step and cadence until the intervals are reduced to the proper distance.

Being in double column of sections, to form line.

100. The command is:

1. *Right and left front into line*, 2. **MARCH,**

Which is executed as previously described (par. 92).

Being in double column of sections, to form single column.

101. The command is:

1. *Form single column*, 2. **MARCH.**

At *march* the right leading section moves forward and the left lead-

ing section oblique to the right into its trace, at the same time all the other sections mark time. As soon as the second section has secured its place the third section moves forward and the fourth section oblique into its trace, and so with all the others in succession.

To close intervals.

102. The exercise being completed and the litters stacked or otherwise disposed of, to bring the sections into a compact body they may first be brought to *close files* (par. 10.); the command then follows:

1. *Assemble on such a section,*
2. *MARCH.*

The designated section stands fast and the other sections face to the right or left as the case may be, and march together upon it, each section facing to the front as soon as facing distance from the nearest section is reached.

This may also be executed with litters at a *shoulder*, the litters being brought to an *order* as the sections halt.

103. Ordinarily at the termination of an exercise the sections are thus assembled, the non-commissioned officers resuming their places on the flanks. The instructor then directs the senior sergeant to *dismiss the company*, which he does by advancing one pace to the front, facing to the left and commanding:

1. *Break rank,*
2. *MARCH.*

TO CARRY THE WOUNDED.

104. The object of all litter drill is the rapid and careful transportation of the wounded, and the preceding exercises are designed to familiarize the bearers with the most prompt and convenient methods of handling the litters while proceeding to and fro in search of the disabled, and to that end they should be carefully and assiduously practised.

To place a wounded man upon a litter.

105. When the section carrying the folded litter approaches a wounded man, it should halt and *prepare* the litter very near by. Usually it is most convenient to place it about two yards from his head, in line with his body; but if this is impracticable, it may be laid in any convenient position.

After temporary dressings, if such are imperatively required, have been applied, the wounded man is to be carefully placed upon the litter.

106. In connection with a completely disabled man there are but two positions, each reached in two ways, that a section may occupy: these are on his right or left, from the front or rear. Front means beyond his feet, and rear behind his head. The command is:

1. *Stand to wounded from rear (or from front), right (or left),* 2. MARCH,
3. LOAD.

107. When from *rear, right*, at MARCH No. 1 advances to the patient's right knee, No. 2 to his right hip, No. 3 to his left hip, and No. 4 to his right shoulder.

108. When from *rear, left*, No. 1 passes along the right of the patient to his left knee, No. 2 advances to his right hip, No. 3 to his left hip, and No. 4 to his left shoulder.

109. When from *front, right*, at MARCH, Nos. 1, 2 and 4 pass by the left side of the patient around his head to his right knee, hip and shoulder, respectively, and No. 3 moves directly to his left hip.

110. When from *front, left*, No. 1 halts at the left knee, No. 2 passes him and halts at the left hip, No. 3 marches directly forward to the right hip, and No. 4 passes by the right side of the patient to the left shoulder.

111. It will be observed that under each of these conditions bearers Nos. 1 and 4 occupy the same position in relation to the patient before he is placed upon the litter as they do afterward, and that the order *right* or *left* indicates the side of the patient upon which the majority of bearers assemble. The position from *front, left*, is the only one in which Nos. 2 and 3 exchange their ordinary places.

112. At the command LOAD the bearers kneel upon the right knee if at *right* or upon the left knee if at *left*; No. 1 passes both arms under or around the patient's legs, carefully supporting the fracture if there be one; Nos. 2 and 3 pass their arms under his hips and loins, the bearer between Nos. 1 and 4 with his palms up and the opposite one with his palms down, interlocking their fingers; No. 4 passes one arm under his neck to the further arm-pit and grasps his own hand by the other passed across the breast, the patient at the same time being cautioned to clasp his own arms around No. 4's neck if possible. No. 4 may vary his posture as the condition of the patient may require, but his constant place is at the shoulder.

All the bearers being ready, at the word from No. 4 they lift together steadily and carefully and support the patient upon their knees. As soon as he is firmly supported there, the bearer on the free side withdraws his arms and passes quickly and by the shortest line to the litter, which he takes up near the middle, one pole in each hand, and returning rapidly places it under the patient and against the bearers' knees, being particularly careful to see that the litter legs are properly arranged, and then clasps hands again with the opposite bearer. At the word from No. 4 the patient is carefully lowered upon the litter. After adjusting the patient with care, the bearers immediately assume the position *lift litter* (par. 31), apply the slings (par. 34), and

at the signal from No. 4 stand erect, lifting the litter. The patient is carried as hereafter described (par. 117).

113. When loaded from *front, left*, No. 2 passes to his original place by the front, and No. 3 by the rear.

114. Under very rare and unfortunate conditions it may be necessary to carry the patient to the litter, instead of the litter to the patient. In that case the first steps are the same, but Nos. 2 and 3, instead of clasping fingers, grasp each other's wrists and then all the bearers, after carefully resting the patient upon their knees and adjusting their arms, rise together and move slowly and steadily, either backward or forward, to the litter upon which they lay him.

115. Should only three bearers be available, No. 1 supports the lower extremities, No. 4 and the bearer on the free side pass their arms under the hips and behind the shoulder blades, clasping each other's wrists and supporting the patient upon their knees. Whether the litter shall be carried to the patient or the patient to the litter, with three bearers, must depend entirely upon the character of the injury.

116. Should there be but two bearers and the patient be incapable of helping himself, a blanket must be carefully slipped under him and then the litter *with folded legs* be laid on the ground close to him. A rifle or a pole is then to be wrapped lengthwise in each long side of the blanket, by means of which the blanket with the patient in it is to be lifted upon the litter.

117. The loaded litter having been *lifted*, at the command MARCH if at drill or at a signal from No. 4 in actual service, the litter is carried to the designated rendezvous, the bearers using the litter step.

The litter step.

118. There are two varieties of the litter step, the *bearer's* and the *single* step.

119. In the *bearer's step* No. 4 steps out with the right foot at the same time that No. 1 steps out with the left foot, and it may be used in the drill of the ordinary company bearers.

120. In the *single step* as No. 1 steps out with the left foot, No. 4 follows with the right before the first is completed, and so in turn. The result is a succession of steps, no two together, like the gait of a "single-foot" horse. This is so difficult to attain except by highly trained men that it may be confined to the Hospital Corps.

121. The object of the litter step is to avoid the disagreeable and often painful jar and swing that follow keeping step the usual way. The length of the litter step is twenty inches, and the rate ninety to the minute. The knees are kept well bent, the hip-joints are little used, the feet raised as little as possible and are set down flat, heel and toe as nearly simultaneously as may be.

122. A wounded man should always be carried feet first except when going up hill, and he should be carried feet first up hill and head first down hill when there is a severe fracture of the lower extremity (see par. 97).

To relieve bearers.

123. When for any reason it is desired to relieve the men actually carrying the litter, the command is :

1. HALT,
2. Exchange,
3. NUMBERS.

At the third command Nos. 1 and 2 exchange places and Nos. 3 and 4 do the same.

To unload wounded.

124. The section having arrived at its destination and halted, the command will be :

1. Prepare to unload,
2. Right (or left),
3. UNLOAD.

At the second command the section takes position as to load ; at the at the third the patient is gently lifted to the bearers' knees and thence to the ambulance litter, or the bearers rise with him in their arms and lay him upon a bed.

125. The litter having been unloaded, the section immediately takes *posts*, folds the litter, and, unless otherwise ordered, carries it to the field in search of other wounded.

As the object of this pamphlet is to explain the system of litter drill, the transportation of the wounded by one, two or three bearers without litters, interesting as it is, is omitted. For the same reason no notes are made on the passage of obstacles and similar points.

MANUAL FOR RIFLE-LITTER.

126. To use the rifle conveniently, the gun slings when in place, should have holes near the upper swivel. (The bands and slings of the rifles issued to the Hospital Corps do not correspond with those in the hands of the line, but resemble them sufficiently for practice). The detachment being in two ranks at carry arms, every front-rank man is No. 1 and every rear-rank man is No. 2. The commands are :

1. Rear open order,
2. MARCH,
3. Front rank, about,
4. FACE.
5. Order,
6. ARMS,
7. Prepare,
8. LITTER.

At litter No. 2 frees his gun-sling entirely from the upper swivel, and holding it in his left hand with the hook to the rear, turns it

half way to the left, passes it through the swivel from below, and catches it in the nearest hole. (If time is important it will be sufficient merely to let out the gun-sling to the last hole, but in that case the sling will have one twist when the litter is made). At the same time No. 1 frees the upper end of his sling entirely from the piece, so that the hook alone remains in the swivel. The but of each piece is then carried midway between the ranks, barrels to the front, the pieces being held just below the upper band, No. 1 using the left and No. 2 the right hand. No. 1 then unhooks his sling and holds it in the right hand and No. 2 draws his sling toward him with his left hand and passes it over the front piece, lifting his own piece to do it, and at the same time grasps the front piece, sliding each hand above the upper band. As No. 1 relinquishes his own piece he passes his sling around the rear gun and through his own swivel, hooking it from below in the hole corresponding to that in No. 2's sling. No. 1 then faces to the front, No. 2 lifts both pieces backward, so that the buts are on a line with and just outside of his toes, and leans forward, gives the muzzles into the hands of No. 1, and, grasping both pieces by the small of the stock, rises, and the litter is prepared.

127. To carry a disabled man upon the rifle litter it should be lowered as near to the ground as necessary at the command :

1. *Lower*, 2. LITTER,

And the patient should sit upon it facing in the direction of the muzzles, his back resting against the breast of No. 2.

The litter is raised at the command :

1. *Lift*, 2. LITTER.

128. To separate the litter into its original parts, the command is:

1. *Break*, 2. LITTER.

At litter No. 2 gently lowers the buts to the ground, grasps both barrels just below the upper bands and stands erect with his arms extended to the front. At the same time No. 1 faces to the rear, unhooks his own gun-sling, grasps his piece just below the lower band and withdraws it and faces to the front, when he fastens his hook in the proper hole and comes to an order. As soon as his piece has been cleared of the other rifle, No. 2 arranges his sling and comes to an order. The commands *carry arms*, and *close order, march*, bring the bearers to their original position.

STATIONARY AMBULANCE DRILL.

129. The regulation ambulance provides transportation for eight men sitting or for two lying. As prepared for the road it contains

two folded litters and four seats, the latter for two occupants apiece.

130. The litters are said to be *packed* when they are folded and have two of the rollers wrapped in the canvas, and are fastened each by a strap about the middle to a longitudinal iron bar along the side of the body and by a loop over one of the rear handles.

131. There are four seats of upholstered leather supported by hooks at the back and by leg-irons in front. When they are horizontal, with the leg-irons resting on the floor-plates, they are said to be *prepared*. When the seats are hooked against the side of the wagon, they are said to be *packed*.

The ambulance with litters and seats packed being at a halt, to prepare the litters for use.

132. The section being halted, with *open* or *closed files*, (pars. 9, and 10) directly in rear of the ambulance, the command is :

1. *Prepare*, 2. *LITTERS*.

Unless otherwise directed, the eight litter is always prepared first. At *Litters* Nos. 1 and 3 advance, roll up the curtain and let down the tail-board; No. 1 then steps into the ambulance, No. 2 advances to the right hind wheel and No. 4 closes up on No. 3. Should No. 3 be encumbered with the property of a wounded man, instead of halting at the tail-board he goes immediately to the driver's seat by the left and deposits it, remaining there or returning to his post as circumstances may require. No. 1 immediately unstraps the right litter and lays the rollers in the right front of the wagon bed and at the same time No. 2 slips off the loop and draws out the handles and, as soon as it is unstrapped, passes the litter back to No. 4 who takes a side step to the right. Both bearers face inward and, supporting the litter by the right pole, extend first the braces and then the legs. If No. 3 is disengaged he assists in preparing the litter. As soon as it is prepared, Nos. 2 and 4 step between the handles, facing to the rear, and at once place the litter on the ground about two yards to the rear of and a little beyond the right hind wheel, unless otherwise directed. As soon as the strap is clear of the litter No. 1 buckles it into itself through the first hole. He then unstraps the left litter and lays the rollers on the right rear of the wagon bed and buckles that strap into itself. As soon as both straps are fastened into themselves, the litters being clear, No. 1 places the rollers in position beginning at the front of the ambulance, and No. 2 assists with the rear rollers when not otherwise occupied.

As soon as the right litter has been withdrawn, No. 3 slips the loop off the left litter, draws out the handles, and when unstrapped passes

it back to No. 4. Nos. 3 and 4 then prepare the litter and place it on the ground opposite the right litter. Should No. 3 be engaged at the front of the ambulance, No. 2 takes his place as soon as the right litter is prepared. As their special duties are completed, each man resumes his place in the section facing the ambulance.

To pack litters.

133. The litters being prepared and at the right and left rear of the ambulance and the section standing between them, the command is :

1. *Pack,* 2. LITTERS.

Unless otherwise directed, the left litter is always packed first. At *litters* Nos. 1 and 3 advance, roll up the rear curtain and let down tail-gate. No. 1 steps into the ambulance, picking up the rear-most roller as he enters, and places both rear rollers in the left rear, and the front rollers in the right rear, and unbuckles both straps, the left first. At the same time Nos. 2 and 4 move to the front and rear of the left litter, face it and, bending over, grasp the left handles, rise and close first the legs, then the braces and then the handles and support the litter horizontally, canvas up. No. 3 then places the two rear rollers on the canvas with their centres a little forward of the centre of the litter and fold the canvas over them to the left. No. 3 then passes the litter into the ambulance, both poles next to the side-board, and catches the loop over one of the rear handles, and No. 1 securely straps the litter in place.

The right litter is packed in a similar way, excepting that Nos. 2 and 4 grasp the right instead of the left handles and that the canvas enclosing the two front rollers is folded to the right. When packed the canvas of both litters looks toward the centre of the wagon. Should No. 3 be absent, the litter after being folded is grounded (par. 45) and No. 2 procures the rollers and folds the canvas.

The ambulance having litters and seats packed, to prepare seats.

134. The ambulance being at a halt and the section directly in its rear the command is :

1. *Prepare,* 2. SEATS.

At *SEATS* Nos. 1 and 3 advance, raise the curtain if necessary, open the tail-gate and enter the ambulance, No. 1 facing the right front and No. 3 the left rear seat. Each bearer stoops or kneels on one knee, seizes the front of the seat about six inches from the end with his left and the other end of the seat with his right hand, lifts it carefully to free the hooks from the upper slots and then slips them into the lower

slots, unfastens the leg straps with his right hand, still retaining his left in place, slips both hands along the leg irons and adjusts them in the floor holes. He tries the seat for firmness before leaving it. No. 1 then prepares the left front and No. 3 the right rear seat.

When the seats are prepared No. 3 leaves the ambulance, but No. 1 remains, unless otherwise directed, until he has stowed such baggage as may be passed to him by the other bearers, when he resumes his place in the section. Nos. 1 and 3 close the tail-gate as soon as all the patients have entered, and fasten the curtain if so required. Should No. 3 be otherwise employed No. 2 takes his place.

135. The ambulance being in motion, Nos. 1 and 3 spring upon the rear steps, raise the curtain if necessary, and enter the ambulance without opening the tail-gate. They then prepare the seats as at a halt, and remain in or leave the ambulance as directed.

The tail-gate is opened by Nos. 1 and 3 as soon as the ambulance halts, and is closed by them as soon as the ambulance moves unless otherwise ordered.

To pack seats.

136. The ambulance being at a halt and the section directly in its rear, the command is:

1. Pack, 2. SEATS.

At SEATS Nos. 1 and 3 advance, raise the curtain, open the tail-gate and enter the ambulance, No. 1 facing the right front and No. 3 the left rear seat. Each bearer stoops or kneels, seizes the front of the seat with both hands near the leg irons, raises it slightly, folds the leg irons and fastens their straps with the right hand while he retains the left in place. He then seizes the end of the seat with the right hand, raises it to clear the hooks from the lower slots, slips them into the upper slots and tries the seat for firmness before leaving it. No. 1 then packs the left front and No. 2 the right rear seat.

Should but one side of the ambulance require to be packed the order will specify which, when No. 1 will work at the front and No. 3 at the rear.

As soon as the seats are packed the bearers resume their places in the section. When No. 3 is otherwise engaged, No. 2 takes his place.

137. Should the ambulance be in motion, Nos. 1 and 3 enter it at the rear as at prepare seats, without disturbing the tail-gate, and pack the seats.

138. Should time be important and the order be

1. Pack seats and prepare, 2. LITTERS,

the seats will first be packed as just described, the litters will then be

unstrapped, No. 1 at the right, the straps buckled into themselves, the rollers placed in position, and the litters rested upon them folded. The tail-gate is opened when the ambulance halts and closed after loading or when it moves.

To load the wounded in the ambulance on litters, the seats being packed and the curtains rolled.

139. In transferring the wounded to the ambulance litter the patient must be laid with his head toward No. 1. Should that not have been done, as when the ambulance litter has been used to bring in wounded from the field, the litter must be wheeled and halted two yards in rear of the ambulance and all the bearers change places. The command is :

1. *Right (or left) wheel,*
2. *MARCH,*
3. *HALT,*
4. *Exchange,*
5. *Posts.*

At HALT if Nos. 1 and 4 are wearing slings they slip both loops off the handles and pass them under their belts; at NUMBERS all the bearers march by their right half way around the litter, assume the places corresponding to their new numbers and then face to the front.

140. Ordinarily the left litter is loaded first. The litter resting with the head of the patient in rear of the ambulance, at the command PASS IN Nos. 1 and 3, if necessary, raise the curtain and lower the tail-gate, and Nos. 1 and 4 lift the litter and advance. Nos. 2 and 3 close the legs, the rear legs first, and support the fore part of the litter. As the tail-gate is reached, the section halts without lowering the litter; No. 1 closes the front handles and steps aside; Nos. 2 and 3 rest the front of the litter on the rear roller and assist No. 4 in passing it in.

Passing a litter in or out of an ambulance, No. 4 depresses his end of the litter until the forward end passes the second roller from the rear when loading, and when about to leave and after leaving that roller during unloading. Should No. 2 or No. 3 be absent the litter is lowered when the rear step is nearly reached, and No. 1 replaces the absent bearer. The front handles are closed before the litter is raised. Three men are indispensable for loading a wounded man on a litter.

To unload litters with wounded from ambulance.

141. Ordinarily the right litter is unloaded first. The section being directly in rear of the ambulance and facing it, at the command PASS OUT Nos. 1 and 3, if necessary, roll up the curtain and open the tail-gate. No. 1 then stands directly in rear of the hind

wheel facing to the rear. Nos. 2 and 3 advance outside of the foot of the litter and face inward and No. 4 advances directly to the foot of the litter, slips off the loop, extends the handles, and draws out the litter facing it. As the litter passes out, Nos. 2 and 3 open the legs and support the sides, taking special care as it leaves the rear roller. As soon as it is clear of the ambulance No. 1 steps in place, extends and grasps the handles. Unless otherwise directed, the litters are placed on the ground five yards to the rear and two yards outside of the right and left wheels respectively. If the patient is to be carried further upon the litter, when the section is halted at the command:

1. *Exchange,* 2. *POSTS,*

The bearers pass by the right to their new positions and if provided with slings adjust them.

142. The wounded having been unloaded and transferred to other litters or beds, or fresh ambulance litters having been provided, these are at once passed, prepared or packed as required, into the ambulance which immediately returns to the field with its section unless otherwise directed.

The following paragraph was accidentally omitted in its proper place.

143. For purposes of drill the positions of the non-commissioned and the junior officers are as follows:

When in line the senior sergeant is on the right flank, the second sergeant on the left flank, and the other sergeants or bearers acting as file-closers are distributed two yards in rear. Should there be more than one medical officer present, the juniors are two yards in rear of the file closers taking regular intervals. As the line may be broken for actual work, all these become chiefs of section and superintend the manipulation of the litters and the removal of the wounded, changing their posts at will, unless otherwise ordered. When the line or the column is marching, the first and second sergeants act as guides, but when the sections are engaged in work they also take post where they can best supervise them. When the files are closed and the sections assembled at the close of the exercise, the officers fall out before the command is dismissed.

But ordinarily the officers and sergeants are charged with the management of particular sections.

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